(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 6 October 2005 (06.10.2005)

CT (10) International Publication Number WO 2005/091893 A3

(51) International Patent Classification:

G01R 27/28 (2006.01) G0. G01R 31/00 (2006.01) G0.

G01R 31/14 (2006.01) **G06F 19/00** (2006.01)

(21) International Application Number:

PCT/US2005/006380

(22) International Filing Date:

28 February 2005 (28.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/550,240

3 March 2004 (03.03.2004) US

(71) Applicant (for all designated States except US): DAKO-CYTOMATION DENMARK A/S [DK/DK]; Produktionsvej 42, DK-2600 Glostrup (DK).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): JOCHUM, Theodore, W. [US/US]; 720 Yarnell Court, Fort Collins, CO 80525 (US). FOX, Daniel, N. [US/US]; 2726 Bradford Square, Fort Collins, CO 80526 (US). THRASHER, Thomas, L. [US/US]; 2318 Kodiak Rd., Fort Collins, CO 80525 (US). MALACHOWSKI, George [AU/AU]; 12 Scarborough Place, Kensington, Melbourne, VIC 3031 (AU).
- (74) Agent: COONEY, Thomas, F.; DakoCytomation Colorado, 4850 Innovation Drive, Fort Collins, CO 80525 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

Published:

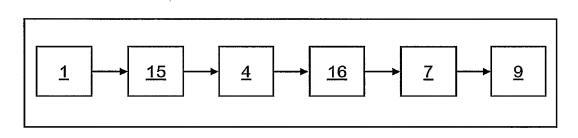
with international search report

(88) Date of publication of the international search report: 4 May 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM FOR HIGH DYNAMIC RANGE ANALYSIS IN FLOW CYTOMETRY

700



(57) Abstract: A flow cytometer (700) capable of using electronics (7, 9) to analyze a large dynamic range while avoiding and/or correcting traditional limitations of acquisition electronics. The invention allows for measuring signal characteristics, which may include but are not limited to linear peak, integral, logarithmic peak, and pulse width. Other system parameters may also be generated by the invention to indicate timing or status information. Accurate and precise measurements may be performed by correcting for input errors if needed, and by transforming the input signal (1) to produce a more easily measured form.

